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EXAMINER
LERNER, MARTIN

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 April 2004 and 12 May 2004</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1 to 12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1 to 12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 12 is objected to because of the following informalities:

Independent claim 12 is incomplete. It ends in a comma, instead of a period, so

there appears to be something missing from the claim. The two "wherein" clauses do

not lead to a grammatically correct sentence. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3.   Claims 1 to 6, 8, and 10 to 12 are rejected under 35 U.S.C. 102(a) as being

clearly anticipated by *Klakow ("Selecting articles from the language model training*

corpus").

4.   Applicants cannot rely upon the foreign priority papers to overcome this rejection

because a translation of said papers has not been made of record in accordance with

37 CFR 1.55. See MPEP § 201.15.

5.   Claims 7, 9, and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by *Ramaswamy et al.*

Regarding independent claim 7, *Ramaswamy et al.* discloses a method of building language models for speech recognition, wherein:

"a text corpus part of a given first text corpus is gradually extended by one or various other text corpus parts of the first text corpus in dependence on text data of an application-specific text corpus to form a second text corpus that is iteratively extended until a predefined criterion is met and in that the values of the language model are generated while the second text corpus from the last iteration is used" – language model constructor 50 reads linguistic units from seed corpus 10 and constructs an initial reference language model 80 from these linguistic units; once an initial reference language model 80 ("a first text corpus") is constructed, iterative corpus extractor 60 reads linguistic units ("one or various text corpus parts") from external corpus 20 and computes a relevance score for each linguistic unit in accordance with language model 80; an iterative language model building technique generates a final language model 90 ("a second text corpus") from a small, domain-restricted seed corpus 15 ("in dependent on text data of an application-specific text corpus") and a large, less restricted external corpus 20; the linguistic units in seed corpus 15 are all highly relevant to a common domain or field ("an application-specific text corpus"), and external corpus 20 contains text data that is less relevant to the domain of interest than the data within the seed corpus; final language model 90 is used in language processing applications (column 2, line 40 to column 3, line 63: Figures 1 and 2); when a sufficient number "n" of linguistic

units have been so extracted ("until a predefined criterion is met"), language model

constructor 50 uses all the data in seed corpus 15 and relevant corpus 40 to construct a

new reference language model 80 in step S4; the number n can either be a

predetermined fixed number or a number that dynamically varies with each language

model building iteration; for example, n may be set based upon a target percentage

change in the size of the relevant corpus, so that the current iteration (of adding

linguistic units to relevant corpus 40) can be considered complete if relevant corpus 40

increases by a certain percentage; also, model checker 70 evaluates the language

model quality, calling for further language building iterations, if necessary, until its

quality is satisfactory ("until a predefined criterion is met") (column 3, line 45 to column

4, line 7: Figures 1 and 2).

Regarding independent claim 9, *Ramaswamy et al.* discloses a method of

building language models for speech recognition, wherein:

"a part of a given acoustic training material, which represents a multitude of

speech utterances, is gradually extended by one or more parts of the given acoustic

training material and in that the acoustic references of the acoustic model are formed by

means of the accumulated parts of the given acoustic training material once a

predefined criteria has been reached" – language model constructor 50 reads linguistic

units ("one or more parts of the given acoustic training material") from seed corpus 10

and constructs an initial reference language model 80 from these linguistic units; once

an initial reference language model 80 is constructed, iterative corpus extractor 60

reads linguistic units from external corpus 20 and computes a relevance score for each

linguistic unit in accordance with language model 80, and incrementally increases the

size of the initial reference language model 80 ("is gradually extended by one or more

parts of the given acoustic training material"); an iterative language model building

technique generates a final language model 90 ("the acoustic model") from a small,

domain-restricted seed corpus 15 and a large, less restricted external corpus 20; the

linguistic units in seed corpus 15 are all highly relevant to a common domain or field,

and external corpus 20 contains text data that is less relevant to the domain of interest

than the data within the seed corpus; final language model 90 is used in language

processing applications (column 2, line 40 to column 4, line 7: Figures 1 and 2); when a

sufficient number "n" of linguistic units have been so extracted ("until a predefined

criterion is met"), language model constructor 50 uses all the data in seed corpus 15

and relevant corpus 40 to construct a new reference language model 80 in step S4; the

number n can either be a predetermined fixed number or a number that dynamically

varies with each language model building iteration; for example, n may be set based

upon a target percentage change in the size of the relevant corpus, so that the current

iteration (of adding linguistic units to relevant corpus 40) can be considered complete if

relevant corpus 40 increases by a certain percentage; also, model checker 70 evaluates

the language model quality, calling for further language building iterations, if necessary,

until its quality is satisfactory ("until a predefined criterion is met") (column 3, line 45 to

column 4, line 7: Figures 1 and 2); implicitly, linguistic units are acoustic units in speech

recognition.

Regarding independent claim 12, *Ramaswamy et al.* discloses a method of

building language models for speech recognition, wherein a language model constructor

50 generates a final language model 90 ("final text corpus") from a relatively small seed

corpus 15 ("a small test corpus") (column 2, lines 40 to 50: Figure 1).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1, 2, 5/1, 5/2, 6/5/1, 6/5/2, 8, 10, and 11 are rejected under 35 U.S.C.

103(a) as being unpatentable over *Ramaswamy et al.* in view of *Bandara et al.*

Regarding independent claim 1, *Ramaswamy et al.* discloses a method of

generating a language model for speech recognition, wherein:

"a first text corpus is gradually [reduced] by one or more various text corpus parts

in dependence on text data of an application-specific second text corpus until a final text

corpus is obtained from iterations of [reductions] of the first text corpus according to

predefined criterion" – language model constructor 50 reads linguistic units from seed

corpus 10 and constructs an initial reference language model 80 from these linguistic

units; once an initial reference language model 80 ("a first text corpus") is constructed,

iterative corpus extractor 60 reads linguistic units ("one or various text corpus parts")

from external corpus 20 and computes a relevance score for each linguistic unit in

accordance with language model 80; an iterative language model building technique

generates a final language model 90 from a small, domain-restricted seed corpus 15

("in dependence on text data of an application-specific second text corpus") and a large,

less restricted external corpus 20; the linguistic units in seed corpus 15 ("an application-

specific second text corpus") are all highly relevant to a common domain or field, and

external corpus 20 contains text data that is less relevant to the domain of interest than

the data within the seed corpus (column 2, line 40 to column 3, line 63: Figures 1 and

2); when a sufficient number "n" of linguistic units have been so extracted ("until a

predefined criterion is met"), language model constructor 50 uses all the data in seed

corpus 15 and relevant corpus 40 to construct a new reference language model 80 in

step S4; the number n can either be a predetermined fixed number or a number that

dynamically varies with each language model building iteration; for example, n may be

set based upon a target percentage change in the size of the relevant corpus, so that

the current iteration (of adding linguistic units to relevant corpus 40) can be considered

complete if relevant corpus 40 increases by a certain percentage; also, model checker

70 evaluates the language model quality, calling for further language building iterations,

if necessary, until its quality is satisfactory ("until a predefined criterion is met") (column

3, line 45 to column 4, line 7: Figures 1 and 2);

"in that the values of the language model are generated on the basis of the

[reduced] final text corpus" – final language model 90 is used in language processing

applications (column 2, line 40 to column 3, line 63: Figures 1 and 2).

Regarding independent claim 1, *Ramaswamy et al.* discloses a method of building language models by iteratively increasing the size of a language model by adding units from a large external text corpus, where the added units are similar to linguistic units in a seed corpus. Thus, *Ramaswamy et al.* discloses gradually and iteratively increasing the size of the language model but omits gradually reducing the size of the language model by reductions. Still, one of ordinary skill in the art would recognize that the language model building method of *Ramaswamy et al.* might be reversed in order gradually to reduce the size of the language model instead of gradually increasing its size. That is, the large external text corpus 20 may be gradually reduced when linguistic units iteratively are compared to, and found to be different from, those in the seed corpus. *Bandara et al.* teaches a method for adapting the size of a language model in a speech recognition system, where an acoustic distance is calculated, and the contents of the language model are reduced with respect to acoustic distance. (Column 5, Lines 20 to 63: Figure 2) The stated advantage is the size of the language model is reduced, while retaining accuracy. (Column 3, Line 56 to Column 4, Line 24) It would have been obvious to one having ordinary skill in the art to reverse the language model building process of *Ramaswamy et al.* as suggested by *Bandara et al.* for the purpose of reducing the size of the language model, while retaining recognition accuracy.

Regarding claim 2, *Bandara et al.* discloses calculating the language model parameters based upon trigram, bigram, and unigram probabilities (column 2, lines 20 to 67).

Regarding claim 5/1 and 5/2, *Ramaswamy et al.* discloses a test corpus ("test text") is used by model checker 70 to evaluate the language model quality, calling for further language building iterations, if necessary, until its quality is satisfactory (column 3, lines 6 to 14; column 3, line 64 to column 4, line 7).

Regarding claim 6/5/1 and 6/5/2, *Ramaswamy et al.* discloses iterative corpus extractor computes a relevance score based upon a perplexity measure relative to a threshold to determine how many linguistic units to add to the language model (column 4, lines 7 to 54).

Regarding independent claim 8, *Ramaswamy et al.* discloses a method of generating a language model for speech recognition, wherein:

"acoustic training material representing a first number of speech utterances is gradually [reduced] until a predefined criterion is met by acoustic training material parts representing individual speech utterances in dependence on a second number of application-specific speech utterances" – language model constructor 50 reads linguistic units ("training material representing a number of speech utterances") from seed corpus 10 and constructs an initial reference language model 80 from these linguistic units; once an initial reference language model 80 ("a first number of speech utterances") is constructed, iterative corpus extractor 60 reads linguistic units from external corpus 20 and computes a relevance score for each linguistic unit in accordance with language model 80, and incrementally increases the size of the initial reference language model 80; an iterative language model building technique generates a final language model 90 from a small, domain-restricted seed corpus 15 ("in dependence on a second number of

application-specific speech utterances") and a large, less restricted external corpus 20;

the linguistic units in seed corpus 15 are all highly relevant to a common domain or field,

and external corpus 20 contains text data that is less relevant to the domain of interest

than the data within the seed corpus (column 2, line 40 to column 4, line 7: Figures 1

and 2); implicitly, linguistic units are acoustic units in speech recognition; when a

sufficient number "n" of linguistic units have been so extracted ("until a predefined

criterion is met"), language model constructor 50 uses all the data in seed corpus 15

and relevant corpus 40 to construct a new reference language model 80 in step S4; the

number n can either be a predetermined fixed number or a number that dynamically

varies with each language model building iteration; for example, n may be set based

upon a target percentage change in the size of the relevant corpus, so that the current

iteration (of adding linguistic units to relevant corpus 40) can be considered complete if

relevant corpus 40 increases by a certain percentage; also, model checker 70 evaluates

the language model quality, calling for further language building iterations, if necessary,

until its quality is satisfactory ("until a predefined criterion is met") (column 3, line 45 to

column 4, line 7: Figures 1 and 2);

"in that the acoustic references of the acoustic model are formed by means of the

[reduced] acoustic training material" – final language model 90 is used in language

processing applications (column 2, line 40 to column 3, line 63: Figures 1 and 2).

Regarding independent claim 8, *Ramaswamy et al.* discloses a method of

building language models by iteratively increasing the size of a language model by

adding units from a large external text corpus, where the added units are similar to

linguistic units in a seed corpus. Thus, *Ramaswamy et al.* discloses gradually increasing the size of the language model but omits gradually reducing the size of the language model. Still, one of ordinary skill in the art would recognize that the language model building method of *Ramaswamy et al.* might be reversed in order gradually to reduce the size of the language model instead of gradually increasing its size. That is, the large external text corpus 20 may be gradually reduced when linguistic units iteratively are compared to, and found to be different from, those in the seed corpus. *Bandara et al.* teaches a method for adapting the size of a language model in a speech recognition system, where an acoustic distance is calculated, and the contents of the language model are reduced with respect to acoustic distance. (Column 5, Lines 20 to 63: Figure 2) The stated advantage is the size of the language model is reduced, while retaining accuracy. (Column 3, Line 56 to Column 4, Line 24) It would have been obvious to one having ordinary skill in the art to reverse the language model building process of *Ramaswamy et al.* as suggested by *Bandara et al.* for the purpose of reducing the size of the language model, while retaining recognition accuracy.

Regarding claims 10 and 11, *Ramaswamy et al.* discloses a method for generating a language model and acoustic models of linguistic units in speech recognition.

8.   Claims 3, 4, 5/3, 5/4, 6/5/3, and 6/5/4 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Ramaswamy et al.* in view of *Bandara et al.* as applied to

claims 1 and 2 above, and further in view of *Klakow ("Language-model optimization by mapping of corpora")*.

Concerning claim 3, *Ramaswamy et al.* discloses calculating a relevance score, but omits a selection criteria of the equation. However, *Klakow ("Language-model optimization by mapping of corpora")* discloses mapping of training corpora by an n-gram perplexity criterion involving the equation. (Page 702, Left Column) This is stated to have the advantage of reduced perplexity for speech recognition applications. (Page 701) It would have been obvious to one having ordinary skill in the art to apply the equation taught by *Klakow ("Language-model optimization by mapping of corpora")* as the relevance score of *Ramaswamy et al.* for the purpose of reducing perplexity in speech recognition applications.

Concerning claim 4, *Bandara et al.* discloses calculating the language model parameters based upon trigram, bigram, and unigram probabilities (column 2, lines 20 to 67).

Concerning claim 5/3 and 5/4, *Ramaswamy et al.* discloses a test corpus ("test text") is used by model checker 70 to evaluate the language model quality, calling for further language building iterations, if necessary, until its quality is satisfactory (column 3, lines 6 to 14; column 3, line 64 to column 4, line 7).

Concerning claim 6/5/3 and 6/5/4, *Ramaswamy et al.* discloses iterative corpus extractor computes a relevance score based upon a perplexity measure relative to a threshold to determine how many linguistic units to add to the language model (column 4, lines 7 to 54).

Response to Arguments

9.   Applicants' arguments filed 07 April 2004 have been fully considered but they are

not persuasive.

Regarding the rejection of claims 1 to 6, 8, and 10 to 12 under 35 U.S.C. 102(a)

as being clearly anticipated by *Klakow ("Selecting articles from the language model*

training corpus"), Applicants argue the reference fails to disclose or suggest the new

limitation, wherein "a final text corpus is obtained from iterations of reductions of the first

text corpus according to predefined criterion". This position is traversed.

Klakow discloses the invention as claimed. The overall strategy for constructing

the final training corpus involves removing articles from a background corpus to obtain a

good training corpus. (Page 1695) One article removal strategy is an iterative strategy,

where the criterion is calculated for all articles and only a small fraction of worst scoring

articles is removed from the corpus. The procedure of rebuilding the language model is

repeated until the corpus has the desired size. (Page 1696: 2.3 Article Removal

Strategy) Either a unigram selection criterion or a bigram selection criterion produces

the final training corpus. (Pages 1695 to 1696: 2.1 The Unigram Selection Criterion and

2.2 The Bigram Selection Criterion) Thus, *Klakow* discloses generating a final text

corpus from iterations of reductions of a first text corpus according to predetermined

criterion to generate a final text corpus.

Regarding the rejections of claims 7 and 9 under 35 U.S.C. 102(e) as being

anticipated by *Ramaswamy et al.*, Applicants argue the references fail to disclose or

suggest the new limitation of "a second text corpus that is iteratively extended until a predefined criterion is met . . . from the last iteration". This position is traversed.

Ramaswamy et al. discloses an iterative language building technique to generate a final language model 90 from a small, domain-restricted seed corpus 15, and a large, less restricted external corpus 20. (Column 2, Lines 40 to 50: Figure 1) Once the initial reference language model 80 is generated, iterative corpus extractor 60 reads linguistic units from external corpus 20 and computes a relevance score for each linguistic unit. Linguistic units having high relevance scores are extracted and placed in relevant corpus 40. The iterative extraction would be complete after a predetermined number of external corpus linguistic units have been analyzed for relevance. (column 3, Lines 37 to 63: Figure 2) Here, "a first text corpus" corresponds to initial reference model 80 and "a second text corpus" corresponds to relevant corpus 40, where relevant text corpus 40 iteratively becomes a final language model as linguistic units are added. The "predetermined criterion" is a target percentage change in the size of the relevant corpus or adding a predetermined number of linguistic unit to relevant corpus 40. Thus, *Ramaswamy et al.* discloses the limitations of "a second text corpus that is iteratively extended until a predefined criterion is met . . . from the last iteration".

Regarding the rejections of claims 1, 2, 5/1, 5/2, 6/5/1, 6/5/2, 8, and 10 to 12 under 35 U.S.C. 103(a) as being unpatentable over *Ramaswamy et al.* in view of *Bandara et al.*, and of claims 3, 4, 5/3, 5/4, 6/5/3, and 6/5/4 under 35 U.S.C. 103(a) as being unpatentable over *Ramaswamy et al.* in view of *Bandara et al.*, and further in view of *Klakow ("Language-model optimization by mapping of corpora")*, Applicants argue the

is combination is not combinable, and would not disclose or suggest the claimed

invention, even assuming *arguendo* that the references were combinable. Applicants

state *Ramaswamy et al.* discloses generating a language model based on a seed

corpus relevant to a domain, whereas *Klakow* discloses selecting articles from a training

corpus, and *Bandara et al.* discloses adapting a size of a language model to an acoustic

distance.

However, Applicants' arguments amount to a general allegation that the claims

define a patentable invention without specifically pointing out how the language of the

claims patentably distinguishes them from the references. Applicants have not pointed

out specifically what language of the claims is not met by the combination of

Ramaswamy et al. in view of *Bandara et al.*

Applicants are merely attacking the references individually without addressing

the basis of the combination. One cannot show nonobviousness by attacking

references individually where the rejections are based on combinations of references.

See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800

F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The combination of *Ramaswamy et al.* and *Bandara et al.* is based upon the

proposition that it would be obvious to reverse the language model building procedure

of *Ramaswamy et al.*, wherein a language model is iteratively extended by adding

linguistic units, to a language model building procedure wherein a language model is

iteratively reduced in size, as suggested by *Bandara et al.* The fact that *Bandara et al.*

may utilize an acoustic distance to discard units does not go to the basis of the

combination. In *Ramaswamy et al.*, a relevance score is computed, which is analogous to the acoustic distance of *Bandara et al.* An acoustic distance is one way of computing a relevance score.

Moreover, *Klakow* does more than select articles from a training corpus, as characterized by Applicants. *Klakow* discloses a joining criterion for mapping an original training corpus to a mapped test corpus by a unigram likelihood of the training data to reduce perplexity. *Ramaswamy et al.* discloses relevance evaluation is based upon a perplexity measure. (Column 4, Lines 17 to 41) As such, the joining criterion of *Klakow* would be advantageous to computing a relevance score in *Ramaswamy et al.* to determine which linguistic units should be placed in relevant corpus 40 for the purpose of reducing perplexity. Thus, Applicants have not addressed the basis of the combination.

Therefore, the rejections of claims 1 to 6, 8, and 10 to 12 under 35 U.S.C. 102(a) as being clearly anticipated by *Klakow ("Selecting articles from the language model training corpus")*, of claims 7, 9, and 12 under 35 U.S.C. 102(e) as being anticipated by *Ramaswamy et al.*, of claims 1, 2, 5/1, 5/2, 6/5/1, 6/5/2, 8, and 10 to 12 under 35 U.S.C. 103(a) as being unpatentable over *Ramaswamy et al.* in view of *Bandara et al.*, and of claims 3, 4, 5/3, 5/4, 6/5/3, and 6/5/4 under 35 U.S.C. 103(a) as being unpatentable over *Ramaswamy et al.* in view of *Bandara et al.*, and further in view of *Klakow ("Language-model optimization by mapping of corpora")*, are proper.
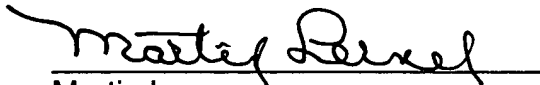
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-9064. The examiner can normally be reached on 8:30 AM to 6:00 PM Monday to Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (703) 305-9645. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

ML
5/24/04

Martin Lerner
Examiner
Group Art Unit 2654